THIS WEEK IN CHEMISTRY

19TH JUNE 2016 – 25TH JUNE 2016

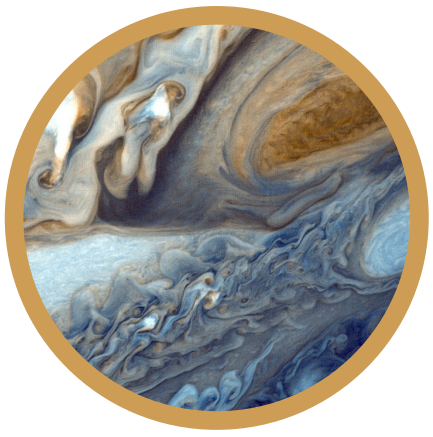
Links to articles & studies for the featured stories are provided at: http://goo.gl/yaOEZ1

ORGANIC POLLUTANTS DETECTED IN THE DEEP OCEAN

Human-made persistent organic pollutant (POP) chemicals have been found at high levels in crustaceans collected from two deep-ocean trenches. Though many of the chemicals have been phased out, their accumulation raises environmental concerns.

ELECTRIC FIELD HELPS LOWER FAT CONTENT OF CHOCOLATE

US scientists developed a method that can help produce chocolate with a lower fat content. It uses an electric field which helps reduce the viscosity of low fat chocolate, which would otherwise prevents it from flowing. It means the fat level can be reduced effectively.



'DARK HYDROGEN' COULD BE FOUND IN GAS GIANT ATMOSPHERES

Hydrogen becomes metallic at the high temperatures and pressures in gas giant planet interiors. Researchers have now found an state between gas and metal referred to as 'dark hydrogen', with somewhat metallic properties, likely to be found in gas giant atmospheres.

TURNING PLASTIC WASTE INTO LIQUID FUEL

By mixing polyethylene plastics with an iridium-based organometallic catalyst, chemists can break them down and create a diesel-like fuel. The ratio of plastic to catalyst still needs to be improved, but it could lead to plastic landfill materials becoming a source of energy.

GREENER SEPARATION OF RARE EARTH ELEMENTS WITH BACTERIA

Many rare earth elements have uses in electronic devices, but they're also notoriously difficult and polluting to separate from each other. A new method uses bacteria, which absorb rare earth elements out of solution, then washes of varying acidity to separate the elements.